AMADA MACHINE TOOLS AMERICA, INC.

AHB TOOLING & MACHINERY

COMPLETE METALWORKING SOLUTIONS

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THE VISION OF PRECISION

Lineup of Saws

AMADA®

Contents

Amada Machine Tools America

With more than 70 years of industry experience, Amada Machine Tools America is committed to helping our customers deliver dependable service and top-quality work with exceptional sawing solutions.

Whatever your sawing needs, we have the right solution for your specific application.

Market-Leading Quality—We believe quality work begins with quality tools designed and built from the ground up to deliver outstanding performance, time after time.

Customer-Driven Innovation—Every feature, function, and configuration we offer has been developed to address the needs of our customers.

Proven Accuracy—We help you take your work to the next level and exceed your customers' expectations.

Reliable Productivity—We understand productivity is the heart of your business, and we can help you optimize it in multiple ways.

A History of Cutting-Edge Manufacturing

Amada Machine Tools was founded on the manufacturing of saws back in 1946. Since that time, our goals have always been to provide our customers with increased productivity and reliability.

And, as technology has evolved, we've embraced CNC automation as a core strength, improving throughput and helping new operators become productive more quickly.

Today, we are uniquely positioned to help you expand your capabilities and grow your business.

Solutions Designed Around Customer Needs

No two customers' needs are exactly alike. Finding the right solution means thoroughly understanding your objectives and configuring a solution to match them precisely. Our engineers bring decades of industry experience to help you achieve your specified goals with a process that fits—and enhances—your workflow.

TECHNOLOGIES OF AMADA

Amada Sawing Technology

A Perfect Match with Amada Blades

Amada also offers another unique advantage in that we manufacture our own bandsaw blades. This allows you to precisely match the characteristics of the blade to the machine to achieve optimum cutting performance, no matter what material you're working with.

Because we manufacture our own blades, we're able to ensure we've got the right blades—in stock—when you need them. And we have expert engineers with years of industry experience on staff to answer any questions you might have.

Finding the Right Solution

No matter what kind of sawing capabilities you need, these machines deliver the proven quality and accuracy that have made Amada the trusted choice for productivity and reliability.

Series	Description
CTB	CNC-controlled horizontal bandsaws designed for carbide-tipped blades
DYNASAW	Dynamic, high-performance bandsaw machines
H	Highly rigid horizontal bandsaws for a wide range of cutting tasks
HA	Semi-automatic horizontal bandsaws
HFA	Fully automatic horizontal bandsaws
HK	Miter-cutting bandsaws for structural steel sections
HKB	NC bandsaws for bundled tubes, solids, and structural materials
PCSAW	Horizontal bandsaws with Amada's revolutionary pulse cutting technology
VM	Vertical bandsaws for cutting blocks and plates
CMB	Circular saws with exceptional surface finishing
SCP	Automated chip compactor

SAWING TECHNOLOGY

Saws

Throughout the steel processing world, the Amada name is known for quality and dependability. Our lineup of industry-leading saws brings a host of innovations designed to improve your productivity. From operator-friendly controls and intuitive CNC software to our patented pulse-cutting technology that offers dramatically improved cutting times while improving blade life, you can count on Amada

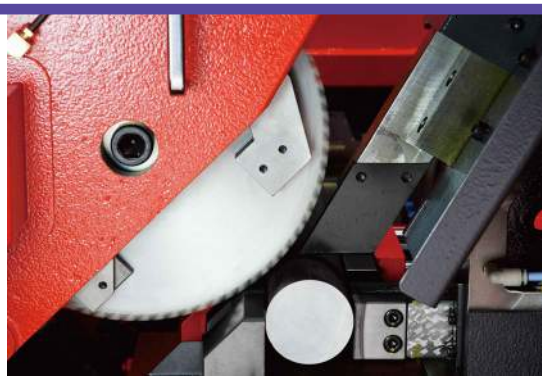
SAWING TECHNOLOGY

CMB Series

The CMB Series of circular saws is designed for high-precision cutting with short cycle times and maximum productivity. For bar stock or tubes, CMB circular saws offer the quality, features, and reliability that have made Amada an industry leader.

CMB75CNC, CMB100CNC, CMB150CNC, CMB230 and CM400

Electric Blade Brake



Vertical Hold-Down

MODEL	CUTTING CAPABILITY ROUND (DIAMETER)	CUTTING CAPABILITY RECTANGLE (W x H)
CMB75CNC	0.394"~3.0" (10 mm~76.3 mm)	0.394" x 0.394"~2.36" x 2.36" (10 mm x 10 mm~60 mm x 60 mm)
CMB100CNC	0.98"~4.0" (25 mm~101.6 mm)	0.98" x 0.98"~2.95" x 2.95" (25 mm x 25 mm~75 mm x 75 mm)
CMB150CNC	2.95"~6.0" (75 mm~152.4 mm)	2.95" x 2.95"~3.94" x 3.94" (75 mm x 75 mm~100 mm x 100 mm)
CMB230	3.15"~9.0" (8~230 mm)	3.15" x 3.15"~6.3" x 6.3" (80 mm x 80 mm~160 mm x 160 mm)
CM400	0.394"~2.36" (10 mm~60 mm)	NA

Features

High-Speed, High-Precision Cutting—CMB circular saws feature an oblique-slide (from the upper oblique direction) cutting mechanism. With high-precision positioning to within ± 0.0004" (0.01 mm) and a rake angle optimized for bar steel materials, fast and accurate cutting is ensured.

Unique Carbide-Tipped Tools—The saw blade is an essential component in high-speed, high-precision cutting. That's why we developed a unique carbide-tipped saw that delivers clean cuts with virtually no burrs. The CMB Series can also utilize high-speed steel blades.

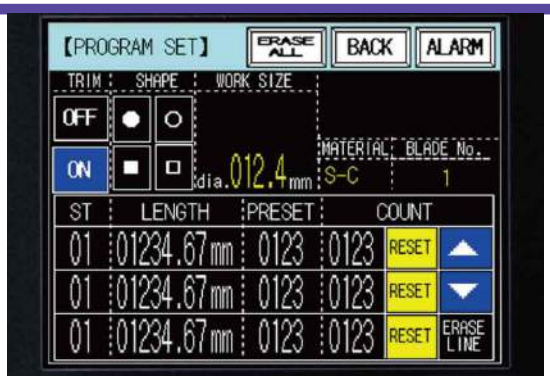
Capable of Cutting a Wide Range of Materials—CMB circular saws can process a wide variety of steel materials, including round bars and rectangular bars in mild steel, stainless steels, tool steels, and nonferrous materials.

Spray-Mist Lubricant Reduces Cleanup—These machines incorporate a semi-dry cutting system that generates eco-friendly oil-mist, so workpieces get less wet when cutting and downstream processing is greatly reduced.

Clean Cut Material Faces—With the high-precision cutting these machines can deliver, the cut face on the workpiece comes out much cleaner compared to bandsaw cuts. As no cleanup work is required, your overall processing time is reduced.

Longer Circular Saw Blade Life—Using oblique-slide cutting and a cemented carbide pad (to dampen vibration), the service life of the saw blade can be greatly increased, reducing your cost per cut.

Hydraulic Material Clamping



User-Friendly CNC Control

High Rigidity and Stability—The highly rigid machine frame reliably supports high-speed operation while the cutting and material feed sections of the machine incorporate AC servo motors and ball screws to ensure stability in high-precision cutting.

High-Precision Auto-Sizing Device—Using a photoelectric switch to detect the leading edge of the workpiece, the auto-sizing device incorporates a gripper that grips the workpiece from the right and left sides, correctly positions the workpiece, and feeds it with high precision.

Cut-In Control by CNC—The input section includes an easy-to-read LCD touch panel with an intuitive layout, allowing the operator to generate machining data, register auto operation programs, and operate the saw.

Power Clutch System—This unique clutch system absorbs backlash on the drive gearing, ensuring the saw blade is correctly positioned at the beginning of the cut and providing a clean and smooth cut face.

High-Speed Gripper—To help reduce total machining time, we incorporated a high-speed gripper and high-speed vises in the cutting area. The gripper is equipped with a retraction function to avoid scratching of the workpieces.

Delivery Chute—The severed leading edges of workpieces are automatically directed to a scrap box. After the cutting of products has begun, the delivery chute automatically shifts its position, and the products are stowed in a product box.

45-Degree Oblique-Slide System (Down Cut)—The position of the saw head shortens cutting distance and lead times.

Standard Accessories

Automatic Loader—The automatic loader allows for continuous, unattended operation at the maximum working speed of the saw.

High-Capacity Loading Table—The loading table of the CMB75CNC, for example, can handle a total of ten 3" round steel bar workpieces (maximum of two tons) at once.

CMB75CNC

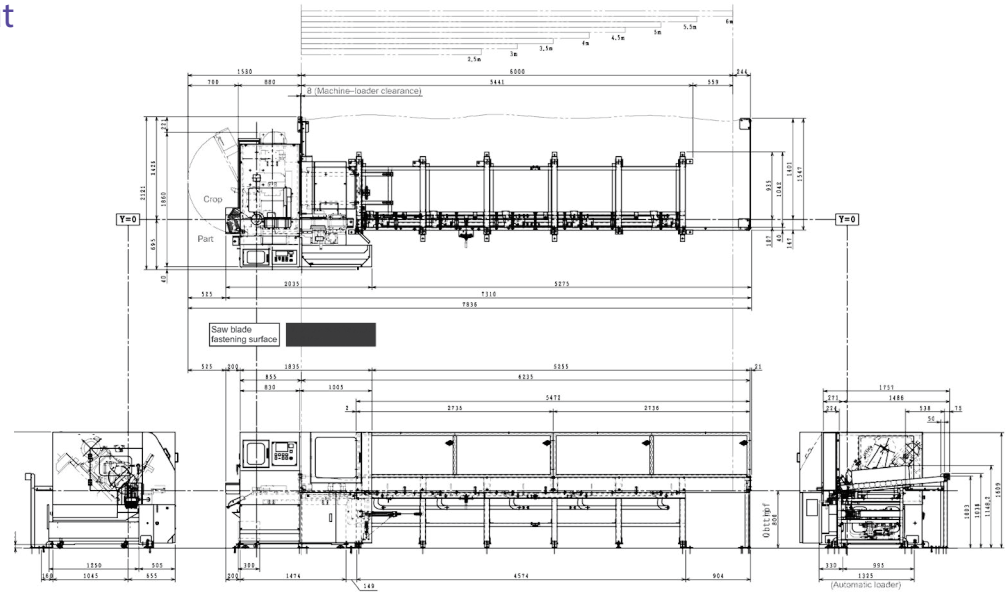
CMB75CNC

CMB75CNC Machine Specifications

CAPACITY	Cutting capacity	Round (diameter)	0.394"~3.0"	10~76.3 mm
		Rectangle (W x H)	0.394" x 0.394"~2.36" x 2.36"	10 x 10~60 x 60 mm
	Maximum stock table loading capacity, round bars (L x D)		19.6' x 3" x 10 bars or 4761 lb*	6000 x 76.3 mm x 10 bars or 2160 kg*
	Incline table dimensions (L x W x H)		17.8' x 49.6" x 45.2"	5447 x 1260 x 1148 mm
BLADE AND SAW HEAD	Saw blade	Blade speed	56~197 rpm, by inverter	
		Number of teeth	60 or 80	
		OD x bore x T	11.2" x 1.57" x 0.08"	285 x 40 x 2.0 mm
	Saw head	Feed drive	Hydraulic cylinder	
MOTORS	Saw blade motor	10 HP	7.5 kW	
	Hydraulic pump motor	2 HP	1.5 kW	
	Cut-to-length feed motor	1 HP, servo motor	0.8 kW, servo motor	
POWER REQUIREMENTS	Power supply voltage	AC220 ± 10%, 3 PH, 60 Hz (all other voltages require transformer)		
	Power requirement	29.1 kVA		
HYDRAULIC	Tank capacity	5.3 gal	20 liters	
MATERIAL INDEX	Index mechanism		Shuttle vise	
	Material index		AC servo motor and ball screw	
	Stroke		28.1"	715 mm
	Length		0.394"~472.44" (multiple indexing)	10~12,000 mm (multiple indexing)
	End trimming length		0.394"~1.57"	10~40 mm
	Remnant length		0.98" plus index length	25 mm plus index length
DIMENSIONS AND WEIGHT	Machine dimensions (W x L x H)		65.6" x 82.7" x 62.3"	1667 x 2100 x 1582 mm
	Machine weight		4409 lb	2000 kg

* Evenly distributed over entire table.

Floor Layout



CMB100CNC

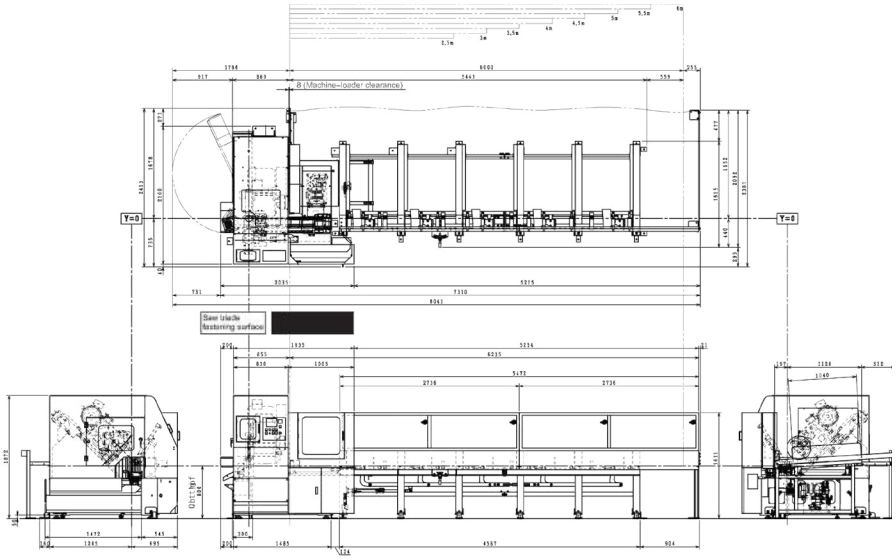
CMB100CNC

CMB100CNC Machine Specifications

CAPACITY	Cutting capacity	Round (diameter)	0.98"~4.0"	25~101.6 mm
		Rectangle (W x H)	0.98" x 0.98"~2.95" x 2.95"	25 x 25~75 x 75 mm
	Maximum stock table loading capacity, round bars (Lx D)		19.6' x 4.0" x 6 bars or 5070 lb*	6000 x 101.6 mm x 6 bars or 2300 kg*
	Incline table dimensions (L x W x H)		17.6' x 45.7 x 44.3"	5367 x 1160 x 1124 mm
BLADE AND SAW HEAD	Saw blade	Blade speed	53~208 rpm, by inverter	
		Number of teeth	60, 80 or 100	
		OD x bore x T	14.1" x 1.57" x 0.10"	360 x 40 x 2.6 mm
	Saw head	Feed drive	AC servo motor with ball screw	
MOTORS	Saw blade motor	15 HP	11 kW	
	Hydraulic pump motor	2 HP	1.5 kW	
	Cut-to-length feed motor	1 HP, servo motor	0.8 kW, servo motor	
POWER REQUIREMENTS	Power supply voltage	AC220 ± 10%, 3 PH, 60 Hz (all other voltages require transformer)		
	Power requirement	32.9 kVA		
HYDRAULIC	Tank capacity	5.3 gal	20 liters	
MATERIAL INDEX	Index mechanism		Shuttle vise	
	Material index		AC servo motor and ball screw	
	Stroke		28.1"	715 mm
	Length		0.394"~472.44" (multiple indexing)	10~12,000 mm (multiple indexing)
	End trimming length		0.394"~1.57"	10~40 mm
	Remnant length		1.18" plus index length	30 mm plus index length
DIMENSIONS AND WEIGHT	Machine dimensions (W x L x H)		73.1" x 82.7" x 70.6"	1857 x 2100 x 1792 mm
	Machine weight		5291 lb	2400 kg

*Evenly distributed over entire table.

Floor Layout



CMB150CNC

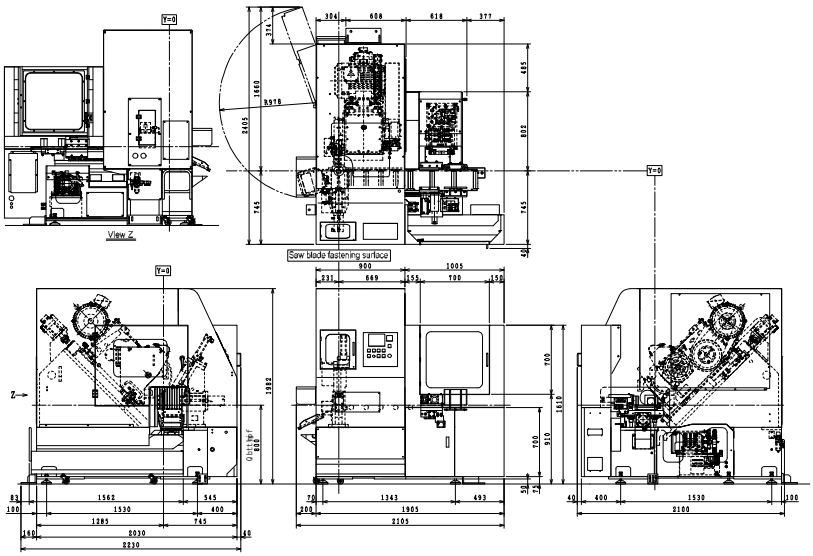
CMB150CNC

CMB150CNC Machine Specifications

CAPACITY	Cutting capacity	Round (diameter)	2.95"~6.0"	75~152.4 mm
		Rectangle (W x H)	2.95" x 2.95"~3.94" x 3.94"	75 x 75~100 x 100 mm
	Maximum stock table loading capacity, round bars (L x D)		19.7' x 6.0" x 3 bars or 5732 lb*	6000 x 152.4 mm x 3 bars or 2600 kg*
	Incline table dimensions (L x W x H)		17.8' x 46.9" x 44.0"	5431 x 1190 x 1117 mm
BLADE AND SAW HEAD	Saw blade	Blade speed	39~149 rpm, by inverter	
		Number of teeth	40 or 60	
		OD x bore x T	18.1" x 1.97" x 0.11"	460 x 50 x 2.7 mm
	Saw head	Feed drive	AC servo motor with ball screw	
MOTORS	Saw blade motor	15 HP	11 kW	
	Hydraulic pump motor	2 HP	1.5 kW	
	Cut-to-length feed motor	3/4 HP, servo motor	0.5 kW, servo motor	
POWER REQUIREMENTS	Power supply voltage	AC220 ± 10%, 3 PH, 60 Hz (all other voltages require transformer)		
	Power requirement	32.5 kVA		
HYDRAULIC	Tank capacity	5.3 gal	20 liters	
MATERIAL INDEX	Index mechanism		Shuttle vise	
	Material index		AC servo motor and ball screw	
	Stroke		29.7"	755 mm
	Length		0.78"~472.44" (multiple indexing)	20~12,000 mm (multiple indexing)
	End trimming length		0.78"~1.57"	20~40 mm
	Remnant length		1.77" plus index length	45 mm plus index length
DIMENSIONS AND WEIGHT	Machine dimensions (W x L x H)		85.1" x 77.4" x 74.1"	2160 x 1967 x 1882 mm
	Machine weight		7275 lb	3300 kg

*Evenly distributed over entire table.

Floor Layout



CMB230

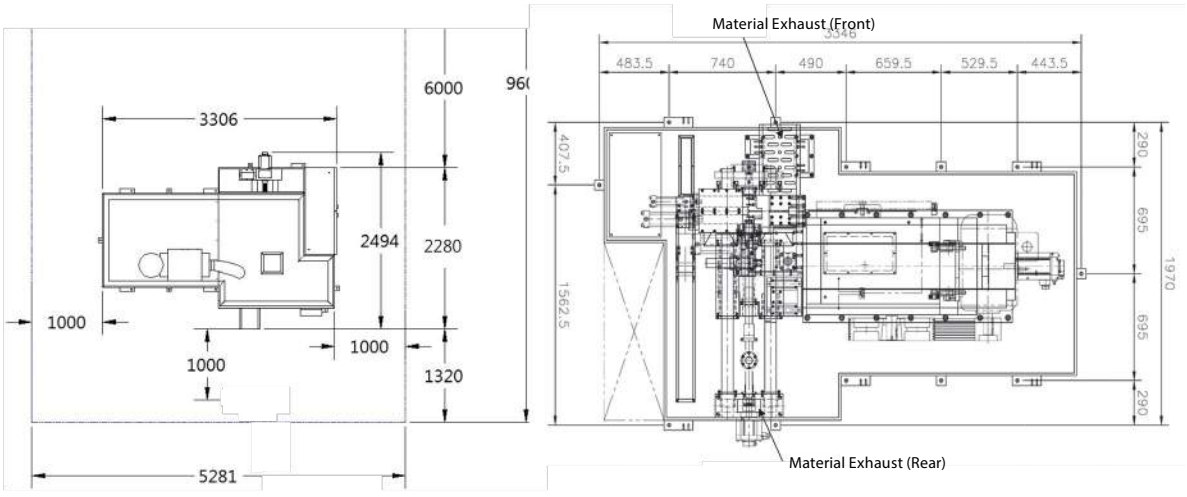
CMB230

CMB230 Machine Specifications

CAPACITY	Cutting capacity	Round (diameter)	3.15"~9.0"	80~230 mm
		Rectangle (W x H)	3.15" x 3.15"~6.3" x 6.3"	80 x 80~160 x 160 mm
	Table height		37.4"	950 mm
BLADE AND SAW HEAD	Saw blade	Blade speed	25~100 rpm, by inverter	
		Number of teeth	50, 60, or 80	
		OD x bore x T	29.5" x 3.15" x 0.15"	750 x 80 x 3.8 mm
	Saw head	Feed drive	AC servo motor	
MOTORS	Saw blade motor	50 HP	37 kW	
	Hydraulic pump motor	5 HP	3.7 kW	
	Sawhead feed motor	9.4 HP, servo motor	7 kW, servo	
	Bar feed motor	4.7 HP, servo	3.5 kW, servo	
	Wire brush motor	0.08 HP, servo	0.06 kW, servo	
POWER REQUIREMENTS	Power supply voltage	AC220 ± 10%, 3 PH, 60 Hz (all other voltages require transformer)		
	Power requirement	60 kVA		
HYDRAULIC	Tank capacity	10.5 gal	40 liters	
	Feeding vise stroke length		19.69"	500 mm
	Minimum cut-off length		0.78"	20 mm
	Minimum remnant length		5.7" plus length of parts	145 mm plus length of parts
DIMENSIONS AND WEIGHT	Machine dimensions (W x L x H)		85.1" x 77.4" x 74.1"	2160 x 1967 x 1882 mm
	Machine weight		18,739 lb	8500 kg
	Loader weight		12,125 lb	5500 kg

*Evenly distributed over entire table.

Floor Layout



CM400

CM400

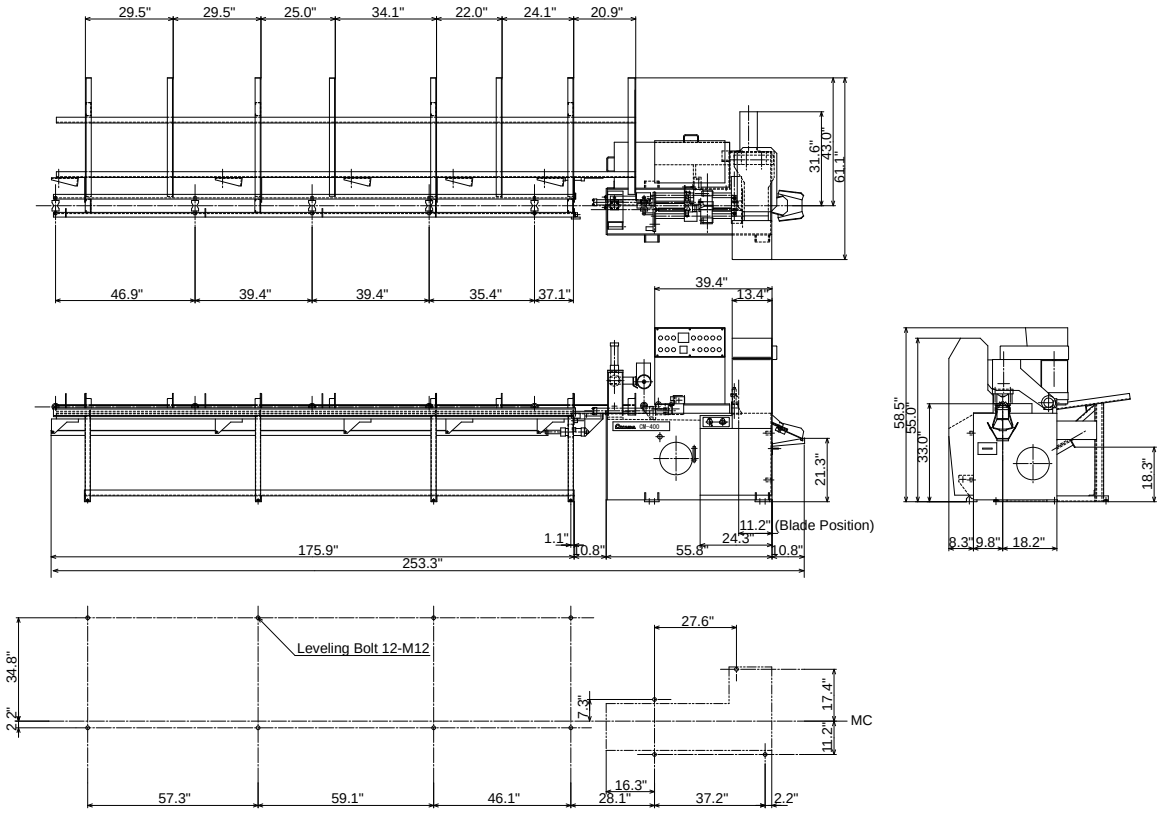
CM400 Machine Specifications

CAPACITY	Cutting capacity	Bars (diameter)	0.394"~2.36"	10~60 mm
		Tubes (diameter)	0.394"~3.54"	10~90 mm
	Maximum stock table loading capacity (L x D)		20' x 2.4" round bars 20' x 3.5" tubes or 4410 lb*	6000 x 60 mm 6000 x 90 mm or 2000 kg*
	Incline table dimensions (L x W)		78.74"~236.22" (L) x 39.37" (W)	2000~6000 mm (L) x 1000 mm (W)
BLADE AND SAW HEAD	Saw blade	Blade speed	14, 18, 25, 32 rpm	
		Number of teeth	70~220	
		OD x bore x T	11"~12.4" x 1.26" x 0.10"~0.12"	280~315 x 32 x 2.5~3 mm
	Saw head	Feed drive	Hydraulic cylinder	
MOTORS	Saw blade motor	3 HP	2.2 kW	
	Hydraulic pump motor	3 HP	2.2 kW	
	Cut-to-length feed motor	1/4 HP	0.18 kW	
	Work feed roller motor	0.42 HP	0.4 kW	
POWER REQUIREMENTS	Power supply voltage	AC220 ± 10%, 3 PH, 60 Hz (all other voltages require transformer)		
	Power requirement	9 kVA		
HYDRAULIC	Tank capacity	15.9 gal	60 liters	
MATERIAL INDEX	Index mechanism		Shuttle vise	
	Length		0.20"~15.75"	5~400 mm
	End trimming length		0.394"	10 mm
	Remnant length		0.394" plus cut-off length	10 mm plus cut-off length
DIMENSIONS AND WEIGHT	Machine dimensions (W x L x H)		61.1" x 253.3" x 58.5"	1522 x 6435 x 1486 mm
	Machine weight		3308 lb (machine unit) 662 lb (work feeding unit)	1500 kg (machine unit) 300 kg (work feeding unit)

*Evenly distributed over entire table.

CMB400

Floor Layout



See Amada Saws at Work

The AMTA Technical Center was created to provide a unique atmosphere for visitors to experience the latest manufacturing technology in action. This stunning 40,000-square-foot facility houses the latest Amada technology in each product group. Much more than just
an exhibit, every machine, automation accessory, and software program in the facility is fully operational and ready to empower customers to solve their most challenging manufacturing applications.

Specifications, appearance and dimensions are subject to change without notice at the sole discretion of Amada's Engineering Department.

There may be differences between the specifications described in this catalog and the Amada products actually shipped. Please ask our staff for more detail.

The products in the catalog may be subject to the provisions of foreign exchange and the Foreign Trade Law. When exporting cargo subject to such controls, permission pursuant to regulation is required. Please contact our business representative in advance when exporting products overseas.

When using our products, safety equipment is required depending on the operational task.

For safe and correct operation, ensure thorough reference to the Instruction Manual prior to operation.

The cutting performance data in this catalog may be affected by temperature, the cutting materials, tool materials, and cutting conditions, etc. Please note that such data are not guaranteed.

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